

COMPLETE IF KNOWN

(use as many sheets as necessary)

Sheet

1

of

4

Application Number

10/573.764

Filing Date

March 29, 2006

First Named Inventor

Williams, et al.

Group Art Unit

1647

Examiner Name

Tan Dang

Attorney Docket Number

21421P

[illegible][illegible]

Examiner
Signature

/lan Dang/

Date
Considered

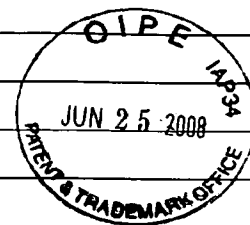
01/14/2009

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SEND TO Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Computer generated Form (IDS Folder) Merck & Co., Inc., 12/1/2007

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			COMPLETE IF KNOWN		
			Application Number	10/573,764	
			Filing Date	March 29, 2006	
			First Named Inventor	Williams, et al.	
			Group Art Unit	1647	
			Examiner Name	Ian Dang	
Sheet	2	of	4	Attorney Docket Number	21421P



NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
		Bhattacharjee, et al., "T-Type Calcium Channels Facilitate Insulin Secretion by Enhancing General Excitability in the Insulin-Secreting Beta-Cell Line, INS*," Endocrinology, Vol. 138, No. 9, 1997, pp. 3735-3740.
		Bourinet, et al., "Splicing of alpha1A subunit gene generates phenotypic variants of P- and Q-type calcium channels," Nature Neuroscience, Vol. 2, No. 5, May 1999, pp. 407-415.
		Buhler, et al., "Cardiovascular care with the new T-type calcium channel antagonist: possible role of attendant sympathetic nervous system inhibition," Journal of Hypertension, Vol. 15, Supplement 5, 1997, pp. S3-S7.
		Burgess, et al., "Single gene defects in mice: the role of voltage-dependent calcium channels in absence models," Epilepsy Research, Vol. 36, 1991, pps. 111-122.
		Catterall, "Excitation-Contraction Coupling in Vertebrate Skeletal Muscle: A Tale of Two Calcium Channels," Cell, Vol. 64, March 8, 1991, pp. 871-874.
		Catterall, "Functional Subunit Structure of Voltage-Gated Calcium Channels," Science, 1991b, Vol. 253, pp.499-1500.
		Catterall, "Structure and Regulation of Voltage-Gated Ca ²⁺ Channels," Annu. Ref. Dev. Biol., Vol. 16, 2000, pp. 521-555.
		Coulter, et al., "Characterization of Ethosuximide Reduction of Low-Threshold Calcium Current in Thalamic Neurons," Annals of Neurology, Vol. 25, No. 6, June 1989, pp. 582-593.
		Cremers, et al., "Effects of the Novel T-Type Calcium Channel Antagonist Mibefradil on Human Myocardial Contractility in Comparison with Nifedipine and Verapamil," J. of Cardiovascular Pharmacology, Vol. 29, 1997, pp. 692-696.
		De Waard, et al., "Structural and Functional Diversity of Voltage-Activated Calcium Channels," (ed. T. Narahashi) pp. 41-87, (Plenum Press, New York, 1996).
		Dunlap, et al., "Exocytotic Ca ²⁺ channels in mammalian central neurons," Trends Neurosci., Vol. 18, 1995, pp. 89-98.
		Enyeart, et al., "T-Type Ca ²⁺ Channels Are Required for Adrenocorticotropin-Stimulated Cortisol Production by Bovine Adrenal Zona Fasciculata Cells," Mol. Endo., Vol. 7, No. 8, 1993, pp. 1031-1040.
		Ertel, et al., "T-Type Ca ²⁺ Channels and Pharmacological Blockade: Potential Pathophysiological Relevance," Cardiovascular Drugs and Therapy, Vol. 11, 1997, pp. 723-739.
		Ertel, et al., "Low-voltage-activated T-type Ca ²⁺ channels," Trends Pharmacology Sci., 1997, pp. 723-739.
		GenBank Accession Number AF211180

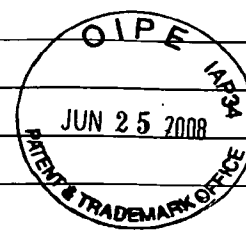
ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /I.D./

Examiner Signature	/Ian Dang/	Date Considered	01/14/2009
--------------------	------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450. Computer generated form "IDS Form" (IDS Folder), Merck & Co., Inc., 12/1/2007

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			COMPLETE IF KNOWN		
			Application Number	10/573,764	
			Filing Date	March 29, 2006	
			First Named Inventor	Williams, et al.	
			Group Art Unit	1647	
			Examiner Name	Ian Dang	
Sheet	3	of	4	Attorney Docket Number	21421P



NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
		Griswold, et al., "Protein Secretions of Sertoli Cells," Int. Rev. Cytol., 1988, pp. 133-156.
		Hess, et al., "Calcium Channels in Vertebrate Cells," Ann. Rev. Neurosci., Vol. 56, 1990, pp. 337-356.
		Hofmann, et al., "Voltage-Dependent Calcium Channels: From Structure to Function," Ref. Physiol. Biochem. Pharmacol., Vol. 139, 1999, pp. 33-87.
		Huguenard, et al., "Low-threshold Calcium Currents in Central Nervous System Neurons," Annu. Rev. Physiol., Vol. 58, 1996, pp. 329-348.
		Lacinova, et al., "Low Voltage Activated Calcium Channels: from Genes to Function," Gen. Physiol. Biophys. Vol. 19, 2000, pp. 121-136.
		Lambert, et al., "T-Type Ca ²⁺ Current Properties Are Not Modified by Ca ²⁺ Channel Beta Subunit Depletion in Nodosus Ganglion Neurons," The Journal of Neuroscience, Vol. 17, No. 17, 1997, pp. 6621-6628.
		Leuranguer, et al., "Antisense depletion of beta-subunits fails to affect T-type calcium properties in a neuroblastoma cell line," Neuropharmacology, Vol. 37, 1998, pp. 701-708.
		Lijnen, et al., "Proliferation of Human Peripheral Blood Mononuclear Cells During Calcium Entry Blockade, Role of Protein Kinase C," Exp. Clin. Pharmacol., Vol. 21, 1999, pp. 253-259.
		Llinas, et al., "Distribution and functional significance of the P-type voltage-dependent Ca ²⁺ channels in the mammalian central nervous system," TINS, Vol. 15, No. 9, 1992, pp. 351-355.
		McCleskey, et al., "Functional Properties of Voltage-Dependent Calcium Channels," Current Topics in Membrane, Vol. 39, 1991, pp. 295-326.
		McCormick, et al., "Sleep and Arousal: Thalamocortical Mechanisms," Annu. Rev. Neurosci., Vol. 20, 1997, pp. 185-215.
		Mittman, et al., "Structure and alternative splicing of the gene encoding alpha II, a human brain T calcium channel alpha subunit," Neuroscience Letters, Vol. 269, 1999, pp. 121-124.
		Monteil, et al., "Specific Properties of T-type Calcium Channels Generated by the Human alpha II Subunit," Journal of Biol. Chem., Vol. 275, No. 22, June 2000, pp. 16530-16535.
		Perez-Reyes, et al., "Molecular Physiology of Low-Voltage-Activated T-type Calcium Channels," Physiol. Rev., Vol. 83, January 2003, pp. 117-161.
		Perez-Reyes, et al., "Molecular characterization of a neuronal low-voltage-activated T-type calcium channel," Letters to Nature, Vol. 39, February 1998, pp. 896-900.

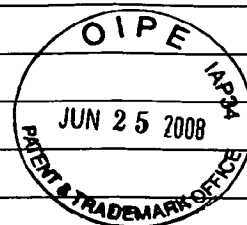
ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /I.D./

Examiner Signature	/Ian Dang/	Date Considered	01/14/2009
--------------------	------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450. Computer generated form "IDS Form" (IDS Folder), Merck & Co., Inc., 12/1/2007

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			COMPLETE IF KNOWN		
			Application Number	10/573,764	
			Filing Date	March 29, 2006	
			First Named Inventor	Williams, et al.	
			Group Art Unit	1647	
			Examiner Name	Ian Dang	
Sheet	4	of	4	Attorney Docket Number	21421P



NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
		Sather, et al., "Distinctive Biophysical and Pharmacological Properties of Class A (B1) Calcium Channel Alpha1 Subunits," Neuron, Vol. 11, August 1993, pp. 291-303.
		Sen, et al., "T-Type Channels Are Abnormal in Genetically Determined Cardiomyopathic Hamster Hearts," Circulation Research, Vol. 75, No. 1, July 1994, pp. 149-155.
		Stea, et al., "Localization and functional properties of a rat brain alpha1A calcium channel reflect similarities to neuronal Q- and P-type channels," PNAS USA, Vol. 91, October 1994, pp. 10576-10580.
		Suzuki, et al., "T-type calcium channels mediate the transition between tonic and phasic firing in thalamic neurons," PNAS USA, Vol. 86, September 1989, pp. 7228-7232.
		Talley, et al., "Differential Distribution of Three Members of a Gene Family Encoding Low Voltage-Activated (T-Type) Calcium Channels," The Journal of Neuroscience, Vol. 19, No. 6, 1999, pp. 1895-1991.
		Todorovic, et al., "Pharmacological Properties of T-Type Ca2+ Current in Adult Rat Sensory Neurons: Effects of Anticonvulsant and Anesthetic Agents," J. Neurophysiol., Vol. 79, 1998, pp. 240-252.
		Tsakiridou, et al., "Selective Increase in T-Type Calcium Conductance of Reticular Thalamic Neurons in a Rat Model of Absence Epilepsy," The Journal of Neuroscience, Vol. 15, No. 4, April 1995, pp. 3110-3117.
		Tsien, et al., "Multiple types of neuronal calcium channels and their selective modulation," TINS, Vol. 11, No. 10, 1988, pp. 431-438.
		Wang, et al., "Ca2+ influx via T-type channels modulates PDGF-induced replication of mouse fibroblasts," Am. J. Physiol., Vol. 265, 1993, pp. C1239-C1246.
		White, et al., "Transient low-threshold Ca2+ current triggers burst firing through an afterdepolarizing potential in an adult mammalian neuron," PNAS USA, Vol. 86, September 1989, pp. 6802-6806.
		Zu, et al., "Increase T-type calcium current in atrial myocytes from adult rats with growth hormone-secreting tumors," PNAS USA, Vol. 87, June 1990, pp. 4655-4659.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /I.D./

Examiner Signature	/Ian Dang/	Date Considered	01/14/2009
--------------------	------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450. Computer generated form "IDS Form" (IDS Folder), Merck & Co., Inc., 12/1/2007